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Abstract of the Disclosure:

An apparatus for testing wafer-level semiconductor devices, in particular memory chips in which a tunable light source radiates energy onto the semiconductor devices. The tunable light source is constructed to adjust the radiated light to a specific wavelength and to a specific intensity and to project the light for a predetermined time. When the semiconductor devices are irradiated with the light, electrons in defective ones of the semiconductor devices, in which a distance between a valence band and a conduction band has a lower value as compared with that of defect-free ones of the semiconductor devices, can be transferred into the conduction band from the valence band. These defective or "poor" semiconductor devices can thus be separated out.

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